



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/890,917	10/03/2001	Sydney Maboka	878.47.USWO	9806
23552	7590	06/17/2004	EXAMINER	
MERCHANT & GOULD PC P.O. BOX 2903 MINNEAPOLIS, MN 55402-0903			ROBERTSON, JEFFREY	
			ART UNIT	PAPER NUMBER

1712

DATE MAILED: 06/17/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/890,917

Applicant(s)

MABOKA, SYDNEY

Examiner

Jeffrey B. Robertson

Art Unit

1712

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 October 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-8, 10, 11 and 13-16 is/are rejected.
- 7) ☒ Claim(s) 9 and 12 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date <u>1001</u> . | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Interpretation

1. The examiner notes that applicant has used the abbreviation MDI and states that this is methyl diisocyanate. However, MDI is commonly used to indicate 4,4'-diphenylmethane diisocyanate. The examiner is unable to determine whether applicant is using methyl diisocyanate as a shorthand for 4,4'-diphenylmethane diisocyanate from the specification, or if applicant intends for MDI to stand for methane diisocyanate, where the methane is unsubstituted. Therefore, the examiner has interpreted the claims as including the common definition for MDI, namely 4,4'-diphenylmethane diisocyanate. Also for claim 1, the term "including" used in (a) does not necessarily limit the amines to those set forth in the claim.

Claim Objections

2. Claim 7 is objected to because of the following informalities: For claim 7, applicant states that the amount of formaldehyde in the UF "may be" approximately 50% in moles. The language "may be" does not require that this limitation actually be present to satisfy the claim. The examiner suggests changing "may be" to "is". Appropriate correction is required.

Claim Rejections - 35 USC § 112

3. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

4. Claims 10, 11, and 16 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

For claims 10 and 11, there is a lack of antecedent basis in the use of the term "suitable" before organometallic and alkali metal, respectively. The term "suitable" was not used in claim 1.

For claim 16, the claim is generally indefinite and unclear. First, the use of "whenever" is indefinite. Is the chipboard as claimed produced by using the binding mixture or not? In addition, applicant sets forth "an additive for a binding mixture, or a process for manufacturing chipboard...as claimed in claim 1". However, claim 1 is directed to a binding mixture, not an additive or a process. Therefore one of ordinary skill in the art would not understand the claim as written.

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 1-8 and 13-16 are rejected under 35 U.S.C. 102(e) as being anticipated by Haas et al. (U.S. Patent No. 6,007,649).

For claims 1, 3, and 7, in column 1, lines 5-12, Haas teaches a process of preparing pressed materials using polyisocyanate binders and latent (delayed-action) catalysts. In column 3, line 27, Haas teaches that 4,4'-diphenylmethane diisocyanate (MDI) is used as the polyisocyanate. In column 4, lines 53-67, Haas teaches that condensation products of urea and formaldehyde (urea-formaldehyde resin) are used in combination with the polyisocyanates, also giving mixing ratios of the binders. In column 1, line 66 through column 2, line 4, Haas teaches that the catalysts are amine-based catalysts, which falls into the definition of amine compound as specified in claim 1. For claim 2, in column 2, line 65 through column 3, line 7, Haas teaches that aqueous emulsions of polyisocyanate are used, which means that MDI is water-emulsifiable. For claim 5, in column 5, lines 55-61, Haas teaches the addition of release agents to the binder. For claim 6, in column 3, lines 48-57, Haas teaches the addition of polyols.

For claim 7, in column 3, lines 27-31, Haas teaches that a mixture of MDI and toluene diisocyanate may be used.

For claim 8, in column 7, line 6, Haas teaches the use of dimethylaminoethanol as a catalyst component.

For claims 13-16, Haas teaches in column 3, lines 57-66, that wood in the form of chips may be used with the binder formulations to form boards under the effect of pressure and heat.

Allowable Subject Matter

7. Claims 10 and 11 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, second paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

8. Claims 9 and 12 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

9. The following is a statement of reasons for the indication of allowable subject matter: For claims 9-12, Haas does not teach or suggest the use of organometallic or alkali metal salt based catalysts. Haas puts particular emphasis on the use of the amine catalysts. In addition, Haas does not teach or suggest the amount of MDI set forth in claim 12.

10. There are several references listed on the international search report as X references. WO 92 09645 A and EP 0 039 137 A are listed as X references, but these references fail to teach or suggest a urea/formaldehyde resin. U.S. Patent No. 5,002,713 is also listed as an X reference, but this reference discloses that formaldehyde-containing binders are not suitable for use in the invention. WO 94 05475 and EP 0 346 059 A are also listed as X references, but these references teach only the use of a polyisocyanate binder and not the presence of urea-formaldehyde binders as required by applicant.


Conclusion

11. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Haider et al. (U.S. Patent No. 6,022,444), Rosthauser (U.S. Patent Nos. 6,224,800 and 6,287,495), Miller et al. (U.S. Patent No. 6,416,696), and Korai et al. (U.S. Patent No. 6,602,451) are cited for general interest.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jeffrey B. Robertson whose telephone number is (571) 272-1092. The examiner can normally be reached on Mon-Fri 7:00-3:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Vasu Jagannathan can be reached on (571) 272-1119. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).


Jeffrey B. Robertson
Primary Examiner
Art Unit 1712

JBR